

Aim: Study of any web testing tool (e.g., Selenium)

What is Selenium?

JavaScript framework that runs in your web browser Works anywhere JavaScript is supported Hooks for many other languages Java, Ruby, Python Can simulate a user navigating through pages and then assert for specific marks on the pages All you need to really know is HTML to start using it right away

Selenium IDE

Selenium **I**ntegrated **D**evelopment **E**nvironment (IDE) is a Firefox plugin that lets testers to record their actions as they follow the workflow that they need to test.

It provides a Graphical User Interface for recording user actions using Firefox which is used to learn and use Selenium, but it can only be used with Firefox browser as other browsers are not supported.

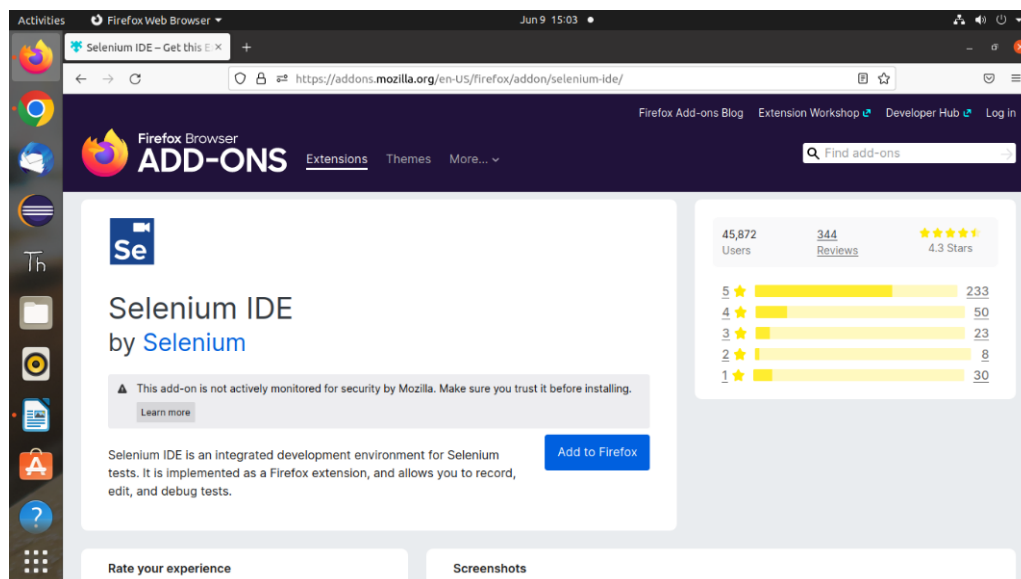
However, the recorded scripts can be converted into various programming languages supported by Selenium and the scripts can be executed on other browsers as well.

Selenium-IDE Download

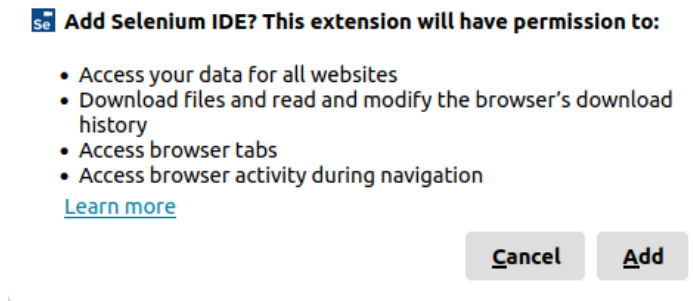
Step 1 – Launch Firefox and navigate to the following URL –

<https://addons.mozilla.org/en-US/firefox/addon/selenium-ide/>

Under the Selenium IDE section, click on the ‘Add to Firefox’ as shown below.

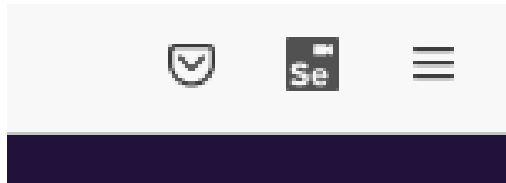


Step 2 – Firefox add-ons notifier pops up with allow and disallow options. User has to allow the installation.



Step 3 – The add-ons installer warns the user about untrusted add-ons. Allow Selenium.

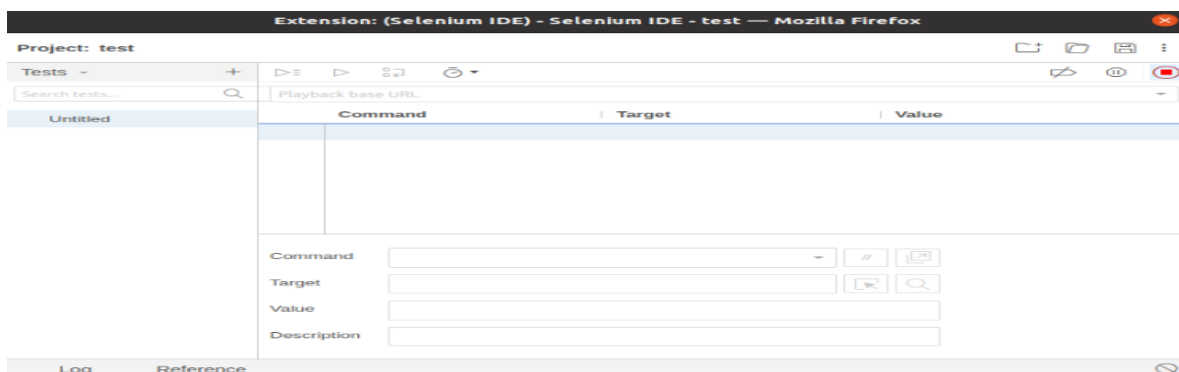
Step 4 – The Selenium IDE can also be accessed directly from the quick access menu bar as shown below.



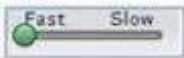







Selenium IDE Features

This section deals with the features available in Selenium IDE.

The following image shows the features of Selenium IDE with the help of a simple tool-tip.



The features of the record tool bar are explained below.

Control	Control Name	Description
	Speed Control	This helps in controlling the speed of the test case runs.
	Run All	Executes the entire test suite that contains multiple test cases.
	Run	Executes the currently selected test.
	Pause/Resume	Allows user to pause or resume the script execution. Enabled only during the execution.
	Step	Helps user to debug the test by executing only one step of a test case at a time.
	Test Runner Mode	Allows user to execute the test case in a browser loaded with the selenium Core. It is an obsolete functionality that likely to be deprecated.
	Apply Rollup Rules	This features allows repetitive sequences of selenium commands to be grouped into a single action.
	Record	This features helps user to Records the user's browser actions.

Creating Selenium IDE Tests

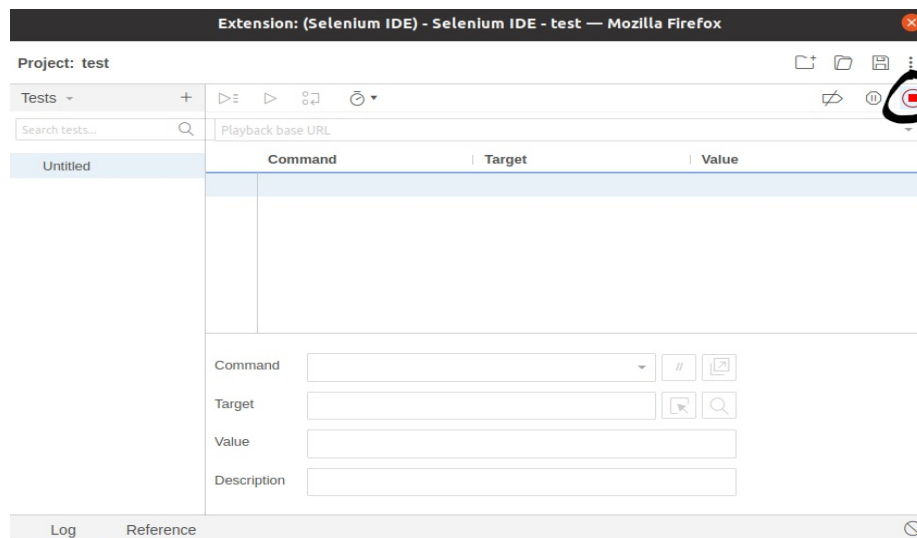
This section deals with how to create IDE tests using recording feature. The following steps are involved in creating Selenium tests using IDE –

- Recording and adding commands in a test
- Saving the recorded test
- Saving the test suite
- Executing the recorded test

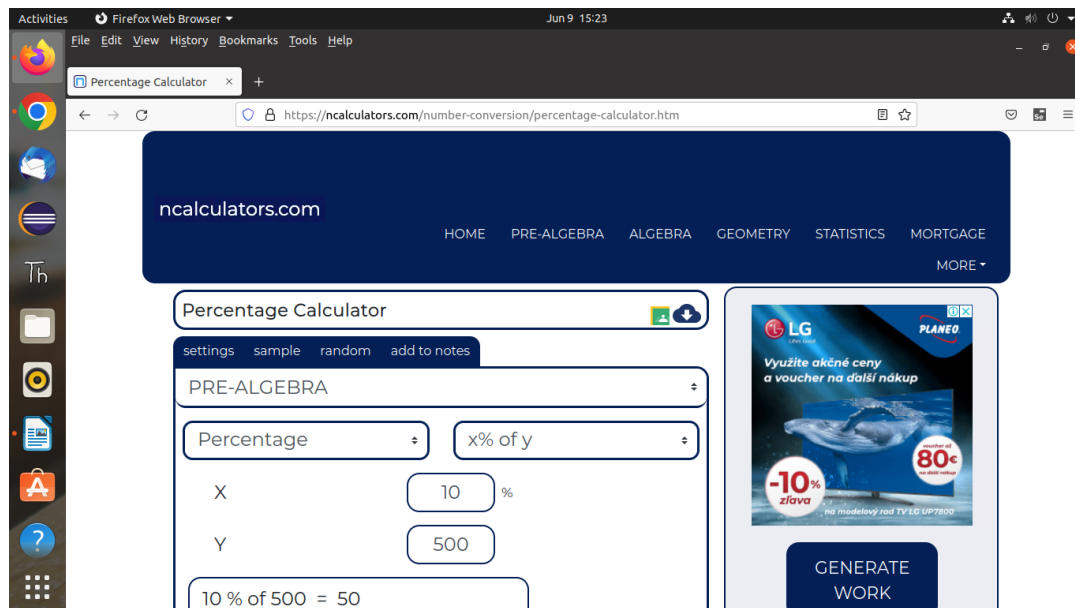
We will use www.ncalculators.com to demonstrate the features of Selenium.

Step 1 – Launch the Firefox browser and navigate to the website - <https://www.ncalculators.com/>

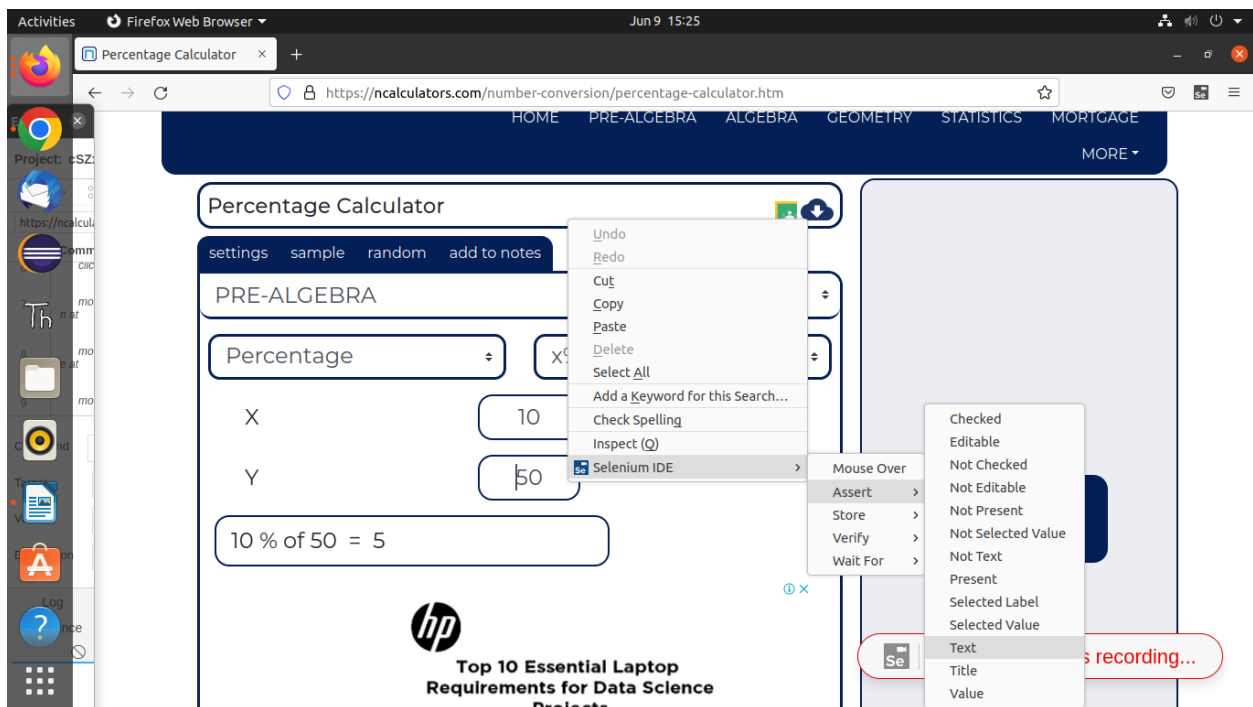
Step 2 – Open Selenium IDE from the Tools menu and press the record button that is on the top-right corner.



Step 3 – Navigate to "Pre-algebra" >> "Percent Calculator" >> enter "10" as x and 500 as y and click "Generate work"



Step 4 – User can then insert a checkpoint by right clicking on the web element and select "Show all available commands" >> select "assert text css=b 5"



Step 5 – The recorded script is generated and displayed.

Step 6 – Stop the recording and click the run all test cases button, after all test cases are passed click on the save button.

